

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| | |
|--|----------------------|
| Applicant(s): Laura Bridge | |
| Application No.: 10/810,083 | Group Art Unit: 2617 |
| Filed: March 26, 2004 | |
| Title: System and Method for Access Point/Probe Conversion | Examiner: Joel Ajayi |
| Attorney Docket No.: 160-071 | |

Mail Stop Appeal Brief-Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

- AMENDED -
APPELLANT'S BRIEF PURSUANT TO 37 C.F.R. § 1.192

This Brief is being submitted in accordance with a Notice of Appeal filed contemporaneously with this Brief.

I. Real Party in Interest

The real party in interest is AutoCell Laboratories, Inc.

II. Related Appeals and Interferences

Appellants are not aware of any appeals or interferences that are related to the present case.

III. Status of the Claims

Claims 1-17 are the appealed claims. Claims 1-17 are currently pending in this application. All of the pending claims are rejected. No claims have been amended. No claims have been allowed.

IV. Status of Amendments

An amendment was filed March 26, 2007, in which no claims were amended and Applicant described distinctions between the claims and the cited references. The amendment was entered by the Examiner and the arguments considered, as indicated in the final office action dated May 14, 2007.

V. Summary of Claimed Subject Matter

Claims 1-17 describe access point-probe conversion. In other words, the subject matter is temporary use of a wireless access point as a probe in a wireless network. As illustrated in Fig. 1 and described at page 4 of the specification, an access point is a device that directly communicates with a terminal device.

Indeed, the *raison d'être* of an access point is to provide network access to terminal devices. As described in the specification at page 6, lines 5-6, an access point in accordance with the invention differs in that it converts its functionality from access point functionality to probe device functionality. The recited steps of converting a selected access point into a probe device and performing probe operations by the probe device are supported by the passage of the specification at page 7, line 3 through page 8, line 15, and also in the description of Figures 4 and 5 beginning at page 9, line 1. The step of forwarding information retrieved from the probe operations to a management device is supported by Figure 2, step 4, and the corresponding description at page 8, lines 3-5. Corresponding elements recited in claim 11 are supported by the same passages and figures. The probe command of claims 2 and 12-14 is illustrated in Figure 2, step 1, which is described at page 7, lines 3-6. Disassociating stations as recited in claims 3-5 is described at page 7, lines 6-16. Access point selection as recited in claims 6-8 and 15-16 is described at page 6, line 1- page 7, line 2. Claim 17 is supported at page 8, lines 8-15.

VI. Grounds of Rejection to be Reviewed on Appeal

- A. Claim 1 is rejected under 35 U.S.C. 103(a) based on U.S. 5,974,331 (Cook) in view of U.S. 6,831,903 (Kang).
- B. Claims 2-17 are rejected under 35 U.S.C. 103(a) based on U.S. 5,974,331 (Cook) in view of U.S. 2003/0123420 (Sherlock).

VII. Argument

A. Claim 1 distinguishes the combination of Cook and Kang because the device converted to a probe is an access point, and further because the access point is converted to a probe.

According to 35 U.S.C. 103(a), a patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Claim 1 is rejected under 35 U.S.C. 103(a) based on Cook in view of Kang. With regard to the limitation “converting a selected access point into a probe device,” the Office references Cook at column 3, lines 56-64. The cited passage of Cook specifically describes operations performed by a base station controller. Base stations controllers, both as a rule and as illustrated in Cook, are only indirectly coupled with mobile phones via base station transceivers. As such, the base station controller is not analogous to an access device, such as recited in claim 1.

Assuming, *arguendo*, that a base station controller is analogous to an access point, the cited combination still fails to suggest claim 1 because there is no teaching that the base station controller be **converted** to a probe device. Indeed, the opposite is true; the base station controller continues to function as a

base station controller while performing the described operations because those operations are normal base station controller operations. In contrast, the claimed access point is temporarily **converted** into a probe device, i.e., no longer functioning as an access point while functioning as a probe device. Being operable to function as either access device or probe device distinguishes the claimed invention from the cited combination. In particular, claim 1 distinguishes the cited combination by reciting “converting a selected access point into a probe device.”

B. Claims 2-17 further distinguish Cook in view of Sherlock.

Claims 2-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cook in view of Sherlock. With regard to claim 11, the Office suggests that the recited “means for selectively operating as either the access device or the probe device in response to receipt of a command at the device” is described by Cook at column 3, lines 56-64. Again, the base station controller is not an access device, and there is no teaching in Cook that the base station controller can selectively operate as either access device or probe. Again, the opposite is true, i.e., the base station controller continues to function as a base station controller while performing the described operations, because those operations are normal base station controller operations. In contrast, as recited in claim 11, the access device operates “as **either** the access device **or** the probe device,” (emphasis added) meaning not both simultaneously. Claim 11 therefore distinguishes the

cited combination by reciting “means for selectively operating as either the access device or the probe device.”

Claims 2 and 12-14 recite forwarding a Probe command to the selected access point. Since a base station controller is not an access point, the cited combination fails to teach this limitation. Assuming the base station controller were equivalent to an access point, the cited combination still fails to suggest this limitation because the base station of the cited combination does not receive a probe command.

Claim 3 recites disassociating stations coupled to the selected access point from the selected access point. Since a base station controller is not an access point, the cited combination fails to teach this limitation. Assuming the base station controller were equivalent to an access point, the cited combination still fails to suggest this limitation because the base station controller does not disassociate all stations in order to probe. Further, those skilled in the art would recognize that while disassociating some stations from an access point might be somewhat disruptive to network operations, disassociating all of the mobile devices from a base station controller would be utterly impractical and unacceptable.

Claim 4 recites forwarding a Reset command to each station coupled to the selected access point. If the Office sincerely believes this feature to be suggested by the cited combination, Applicant requests a more specific description of where it might be found.

Claim 5 recites failing to respond to communications from each station coupled to the selected access point. Since a base station controller is not an access point, the cited combination fails to teach this limitation. Assuming the base station controller were equivalent to an access point, the cited combination still fails to suggest this limitation because the base station controller does not fail to respond to all stations in order to probe. Further, those skilled in the art would recognize that while failing to respond to stations from an access point might be somewhat disruptive to network operations, failing to respond to all of the mobile devices from a base station controller would be utterly impractical and unacceptable.

Claim 6 recites that the selected access point is selected in response to its proximity to an unauthorized access point. An access point is a wireless device, so when operating as a probe the proximity to an unauthorized device has practical implications, e.g., range of signal. A base station controller is not a wireless device, and its physical proximity to other devices is irrelevant.

Claim 15 recites that the event is the detection of an unauthorized access point in the network. If the Office maintains that the base station controller is analogous with an access point, then the Office must also believe that there exists a possibility of a rogue base station controller. However, that scenario is nonsensical because the rogue base station controller would have to be physically connected with the network since it is not a wireless device.

VIII. Conclusion

Appellant therefore submits that the rejections of the present claims under 35 U.S.C. 103 are improper for at least the reasons set forth above. Appellants accordingly request that the rejections be withdrawn and the case put forward for allowance.

Respectfully submitted,

| | |
|-----------------|------------------------------------|
| August 16, 2007 | /Holmes W. Anderson/ |
| Date | Holmes W. Anderson, Reg. No. 37272 |
| | Attorney/Agent for Applicant(s) |
| | McGuinness & Manaras LLP |
| | 125 Nagog Park |
| | Acton, MA 01720 |
| | (978) 264-6664 |

Date: August 16, 2007

Appendix A - Claims

1. (original) A method for monitoring a wireless network comprised of a plurality of access points coupled to a plurality of stations, the method comprising the steps of:
 - converting a selected access point into a probe device;
 - performing probe operations by the probe device; and
 - forwarding information retrieved from the probe operations to a management device.
2. (original) The method of claim 1, wherein the step of converting the selected access point includes the step of forwarding a Probe command to the selected access point.
3. (original) The method of claim 1, wherein the step of converting the selected access point into a probe device includes the steps of disassociating stations coupled to the selected access point from the selected access point.
4. (original) The method of claim 3, wherein the step of disassociating stations includes the step of forwarding a Reset command to each station coupled to the selected access point.

5. (original) The method of claim 3, wherein the step of disassociating stations includes the step of failing to respond to communications from each station coupled to the selected access point.
6. (original) The method of claim 1, wherein the selected access point is selected in response to its proximity to an unauthorized access point.
7. (original) The method of claim 1 wherein the selected access point is automatically selected in response to the detection of a network problem.
8. (original) The method of claim 1, wherein the selected access point is automatically selected in response to a periodic scan of each of the plurality of access points in the network.
9. (original) The method of claim 1, further comprising the step of converting the probe device into an access point after forwarding information to the management device.
10. (original) The method of claim 1, wherein the selected access point includes a plurality of radio frequency channels, and wherein the selected access point continues to serve as an access point for a first subset of the plurality of channels and serve as a probe device for a second subset of the plurality of channels.

11. (original) A device comprising:
 - means for operating as an access device to permit a plurality of wirelessly coupled devices to communicate with a wired network, the access device and the plurality of wirelessly coupled devices forming a wireless network;
 - means for operating as a probe device for scanning the plurality of wirelessly coupled devices to obtain operating statistics for the wireless network; and
 - means for selectively operating as either the access device or the probe device in response to receipt of a command at the device.
12. (original) The device of claim 11, wherein the command is a Probe command forwarded by a network manager to the device.
13. (original) The device of claim 11, wherein the command is a Probe command received a command line interface on the device.
14. (original) The device of claim 11, wherein the Probe command is automatically generated by the device in response to an event.
15. (original) The device of claim 14, wherein the event is the detection of an unauthorized access point in the network.

16. (original) The device of claim 14, wherein the event is the detection of network performance degradation in the wireless network.
17. (original) The device of claim 14, wherein the means for operating as an access point operates over a range or channels, and wherein the means for operating as a probe device operates over the range of channels, and wherein the device operates as an access device over a first subset of the range of channels and operates as a probe device over a second subset of the range of channels.

Appendix B - Evidence Submitted

None.

Appendix C - Related Proceedings

None.